

**ACTIVE PIXEL SENSOR WITH INTRA-PIXEL CHARGE TRANSFER****ABSTRACT OF THE DISCLOSURE**

An imaging device formed as a monolithic complementary metal oxide semiconductor integrated circuit in an industry  
5 standard complementary metal oxide semiconductor process,  
the integrated circuit including a focal plane array of  
pixel cells, each one of the cells including a photogate  
overlying the substrate for accumulating photo-generated  
charge in an underlying portion of the substrate, a readout  
10 circuit including at least an output field effect transistor  
formed in the substrate, and a charge coupled device section  
formed on the substrate adjacent the photogate having a  
sensing node connected to the output transistor and at least  
one charge coupled device stage for transferring charge from  
15 the underlying portion of the substrate to the sensing node.